

1       **VI. CLAIMS**

2  
3       What is claimed is:

4  
5       1.     A separator device, comprising:

- 6  
7       A)    a wound conduit member having an internal surface and an  
8            outermost wall portion and including an inlet and an outlet,  
9            and said outermost wall portion including a plurality of  
10           through openings with an inwardly extending wall  
11           cooperatively disposed adjacent and downstream to said  
12           through openings at an angle to facilitate the exit of solids by  
13           defining an entrance adjacent to said outermost wall portion;  
14  
15       B)   means for applying a pressure differential between said inlet  
16            and outlet so that a fluid having small particles in suspension  
17           entering said inlet is forced through said wound conduit  
18           member and out through said outlet causing said small  
19           particles to be forced out through said through openings by the  
20           action of centrifugal forces; and  
21  
22       C)   housing means wherein said wound conduit member is  
23            mounted therein thereby containing said small particles.

24  
25       2.    The device set forth in claim 1 wherein said outermost wall  
26            portion includes outwardly extending walls for each of said through  
27           openings cooperatively disposed adjacent and upstream to said  
28           through openings to prevent said small particles from coming back

1 inside said conduct member, said outwardly extending walls are  
2 cooperatively disposed at an angle to facilitate the exit of said liquid  
3 by defining an entrance adjacent to said outermost wall portion.  
4

5 3. The device set forth in claim 2 wherein said inwardly extending  
6 wall is positioned at an angle between 15 and 45 degrees with respect  
7 to said internal surface.  
8

9 4. The device set forth in claim 3 wherein said outwardly  
10 extending wall is positioned at an angle between 15 and 45 degrees  
11 with respect to said outermost wall portion.  
12

13 5. A separator device, comprising:  
14

15 A) a wound conduit member having an outermost wall portion  
16 and including an inlet and an outlet, and said outermost wall  
17 portion including a plurality of through openings with an  
18 inwardly extending wall cooperatively disposed at an angle to  
19 facilitate the exit of liquid by defining an entrance adjacent to  
20 said outermost wall portion;  
21

22 B) means for applying a pressure differential between said inlet  
23 and outlet so that a fluid having liquids in suspension entering  
24 said inlet is forced through said wound conduit member and  
25 out through said outlet causing said liquid to be forced out  
26 through said through openings by the action of centrifugal  
27 forces; and  
28

1 C) housing means wherein said wound conduct member is  
2 mounted therein thereby containing said liquid as it exits said  
3 conduit member.  
4

5 6. The device set forth in claim 5 wherein said outermost wall  
6 portion includes outwardly extending walls for each of said through  
7 openings cooperatively disposed adjacent and upstream to said  
8 through openings to prevent said small particles from coming back  
9 inside said conduct member, said outwardly extending walls are  
10 cooperatively disposed at an angle to facilitate the exit of said liquid  
11 by defining an entrance adjacent to said outermost wall portion.  
12

13 7. The device set forth in claim 6 wherein said inwardly extending  
14 wall is positioned at an angle between 15 and 45 degrees with respect  
15 to said internal surface.  
16

17 8. The device set forth in claim 7 wherein said outwardly  
18 extending wall is positioned at an angle between 15 and 45 degrees  
19 with respect to said outermost wall portion.  
20  
21  
22  
23  
24  
25  
26  
27  
28